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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/760,242	01/12/2001	Robert J. Davidson	10002343-1	2554

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

CORBETT, MITCHELL

ART UNIT	PAPER NUMBER
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2614

3

DATE MAILED: 11/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

TS

Office Action Summary

Application No.

09/760,242

Applicant(s)

DAVIDSON, ROBERT J.

Examiner

Mitchell J Corbett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: in the specification on page 1, lines 5-10, the application number corresponding to attorney docket number 10002307-1 is missing. Appropriate correction is required.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: in claim 8, wherein the storing and recalling step of claim 1 are in a broadband frequency format, is not disclosed in the specification. The specification only refers to the step of downloading from the centralized movie database to the purchase center as being in a broadband frequency format (page 4, lines 22-23 and page 5, lines 1-3).

Claim Rejections - 35 USC § 112

2. Claims 13-15, 17, and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "similar to" in claims 13 and 14 is a relative term which renders the claim indefinite. The term "similar to" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The references in claim 13 to "each storage area", and in claim 14 to "each emitter" has been rendered indefinite by the use of the term "similar to".

Claim 15 recites the limitation "the ultra-high capacity storage device" in line 1 of the claim. There is insufficient antecedent basis for this limitation in the claim. The system of claim 9 does not claim an "ultra-high capacity" device; it specifies only a storage device, including an atomic resolution storage device. Appropriate correction is required.

Claim 17 recites the limitation "the playback device" in line 1 of the claim. There is insufficient antecedent basis for this limitation in the claim. The system of claim 15 does not contain a playback device; it specifies only a storage device, a communication

interface, and a housing for both. If it is intended that claim 17 is to be dependent on claim 16, the appropriate correction is required.

Claim 18 recites the limitation "the centralized movie database" in line 1 of the claim. There is insufficient antecedent basis for this limitation in the claim. The system of claim 15 does not contain a centralized movie database; it specifies only a storage device, a communication interface, and a housing for both. If it is intended that claim 18 is to be dependent on claim 16, the appropriate correction is required.

In order to advance the prosecution on the merits, in view of the 112 rejections above, the Examiner considers claim 17 and 18 to be dependent on claim 16.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1,4, 7, 9, 10, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cantone (US 5,734,781), and in view of Browning (US 6,629,193).

Considering claim 1, Cantone discloses a system and method of storing electronically readable movie data into a video storage module (see digital videocassette 10, column 2, lines 9-13) and recalling selectively the video data from the storage module into a playback device (see VCR, column 2 lines 22-25) for viewing by a user (column 2, lines 20-30).

Cantone fails to specifically disclose said storage module including an atomic resolution storage memory, as recited in the claim.

Browning discloses an information storage device consisting of an atomic resolution storage component (see memory device 24, column 2, lines 54-57), wherein said storage device is capable of storing digitized media (including movies) (column 5 lines 46-56), for the advantage of providing a compact and low-power method of storing digitized media.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Cantone whereby said storage module includes an atomic resolution storage memory, as taught by Browning, for the advantage of providing a compact and low-power method of storing digitized media.

Considering claim 4, the combined methods of Cantone and Browning disclose a method of repeatedly storing additional electronically readable movies into the memory component of the storage module (Cantone, column 3, lines 56-59).

As for claim 7, the combined methods of Cantone and Browning (as recited above) fail to disclose said memory component further including a controller logic for operating the device and communicating between the memory and communications interface.

Browning further discloses said memory component containing controller logic for operating the device, as well as providing communications between the memory and communications interface (see controller 26, column 2, lines 64 through column 3, lines 4), for the purpose of providing a means for controlling and operating the storage module.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined methods of Cantone and Browning to include a controller logic for operating the device and communicating between the memory and communications interface, as further taught by Browning, for the purpose of providing a means for controlling and operating the storage module.

As for claim 9, Cantone's system discloses a personal movie storage module comprising a storage device (Cantone, column 2, lines 20-30) capable of storing at least one movie (column 3, lines 56-58). Cantone fails to specifically disclose an atomic resolution storage device and a communication interface for communicating to and from the memory components of the storage module.

Browning discloses an atomic resolution storage memory capable of storing a movie (Browning, column 2, lines 54-57 and column 5 lines 46-56 and an

accompanying interface for communication to and from said memory component of the storage module (Browning, see controller 26, column 2, lines 64 through column 3, lines 4), for the purpose of providing an ultra-high capacity means to store and recall data from memory of the storage module.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined methods of Cantone and Browning to include an interface for communication to and from said memory component of the storage module, as further taught by Browning, for the purpose of providing an ultra-high capacity means to store and recall data from memory of the storage module.

As for claim 10, the combined systems of Cantone and Browning disclose a controller on the storage device for operating the device and communicating between the memory component and communication interface (see controller 26, Browning, column 2, lines 64 through column 3, lines 4).

As for claim 15, the combined methods of Cantone and Browning (as recited above) fail to disclose said system further comprising a housing enclosing said storage device and the communication interface.

Browning further discloses said system further comprising a housing enclosing said storage device and the communication interface (see housing 12, column 2, lines 37-39), for the purpose of protecting the internal storage device and interface.

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It would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined methods of Cantone and Browning to include a device further comprising a housing enclosing said storage device and the communication interface, as further taught by Browning, for the purpose of protecting the internal storage device and interface.

5. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cantone in view of Browning, as applied to claim 1 above, and further in view of Allen (US 5,909,638).

Considering claim 2, although Cantone and Browning disclose a method of storing and recalling movies into and from the memory component of a personal movie storage module, they fail to specifically disclose the method further including transferring a copy of the movie from a purchase center into said memory component, as recited in the claim.

Allen discloses a method of high-speed video distribution wherein a copy of a movie is transferred from a purchase center into a memory component (in this case, a VHS tape) (column 3, lines 44-48), for the advantage of providing a convenient means for accessing new or popular movies.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined methods of Cantone and Browning to include transferring a copy of the movie from a purchase center into said memory component,

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as taught by Allen, for the advantage of providing a convenient means for accessing new or popular movies.

Considering claim 3, the combined methods of Cantone, Browning, and Allen (as recited above) fail to disclose downloading said movie from a remotely located centralized movie database.

Allen further discloses a method of downloading said movie from a remotely located centralized movie database (Allen, column 3, lines 38-40), for the advantage of providing a large, centrally located selection of movies to its customers.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined methods of Cantone, Browning, and Allen to include downloading said movie from a remotely located centralized movie database, as further taught by Allen, for the advantage of providing a large, centrally located selection of movies to its customers.

6. Claims 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cantone in view of Browning, as applied to claim 1 above, and further in view of Chung (US 6,628,963).

Considering claim 5, Cantone and Browning disclose a movie storage module including an atomic resolution storage memory component. Although Cantone

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discloses the use of a playback device (column 2, lines 58-62), neither Cantone nor Browning specifically discloses the device including a personal movie player, as recited in the claim.

Chung further discloses a personal multimedia player capable of playing back digitized movies (column 1, lines 27-30 and MPEG data processing, column 1, lines 44-46), for the advantage of providing a portable means of playing back digital media.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined methods of Cantone, Browning to include a personal movie player, as further taught by Chung, for the advantage of providing a portable means of playing back digital media.

As for claim 8, the combined methods of Cantone, Browning, and Chung (as recited above) fail to disclose the step of storing and recalling as being in a broadband frequency format.

Chung further discloses a method of storing and recalling said movie content in a compressed, broadband frequency format (see MPEG, column 1, lines 44-46), for the advantage of providing a fast and efficient way of storing and recalling data.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined methods of Cantone, Browning, and Chung to further include the step of storing and recalling as being in a broadband frequency format, as further taught by Chung, for the advantage of providing a fast and efficient way of storing and recalling data.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cantone in view of Browning, as applied to claim 1 above, and further in view of Marshall (US 6,632,175).

Considering claim 6, Cantone and Browning disclose a method of portably storing movies through the use of a storage module. Browning further discloses the storage module as having a communication interface (see connector 20, Browning, column 2, lines 39-41). Although Browning describes a power converter associated with the storage module (see power converter 32, column 3, lines 5-8) Cantone and Browning do not specifically disclose the storage module as having a power supply as recited in the claim.

Marshall discloses a data-recording device which includes an atomic resolution storage device (column 2, lines 13-15). Marshall further discloses the storage device being coupled to a power supply (column 2, lines 18-19), for the advantage of eliminating external power dependence for normal operation.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined methods of Cantone, Browning to include said storage module having a power supply, as taught by Marshall, for the advantage of eliminating external power dependence for normal operation.

8. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cantone in view of Browning, as applied to claim 1 above, and further in view of Gibson, et al. (Gibson) (US 5,557,596).

Considering claim 11, although Browning describes the essentials of the atomic resolution storage device, the combined systems of Cantone and Browning fail to disclose the atomic resolution storage device comprising: a micro-fabricated field emitter capable of generating an electron beam current, and a storage medium near the field emitter having a storage area in one of a plurality of states to represent data.

Gibson discloses an atomic resolution storage device comprising a micro-fabricated field emitter capable of generating an electronic beam (column 1, lines 63-67), and a storage medium near the field emitter and having a storage area in one of a plurality of states to represent data stored in the storage area (column 2, lines 7-14), for the purpose of generating an ultra-high density device capable of reading and writing data on an atomic scale.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined systems of Cantone and Browning to include the atomic resolution storage device comprising a micro-fabricated field emitter capable of generating an electron beam current, and a storage medium near the field emitter having a storage area in one of a plurality of states to represent data, as taught by Gibson, for the purpose of generating an ultra-high density device capable of reading and writing data on an atomic scale.

As for claim 12, the combined systems of Cantone, Browning, and Gibson disclose an effect being generated when the electron beam current bombards the storage area, wherein the magnitude is dependent on the state of said storage, and wherein storage data is read by measuring the magnitude of the effect (Gibson, column 2, lines 15-20).

As for claim 13, the combined systems of Cantone, Browning, and Gibson disclose the atomic resolution storage module further comprising a plurality of said storage areas and a micro fabricated mover in the storage device for positioning various areas to be bombarded by the electron beam current (Gibson, column 2, line 3, and lines 25-30).

As for claim 14, the combined systems of Cantone, Browning, and Gibson disclose the atomic resolution storage module further comprising a plurality of said field emitters, with each emitter being spaced apart, and with each emitter being responsible for a number of storage areas such that said emitters can function in parallel to increase the data rate of the storage device (Gibson, column 2, lines 3-6 and 31-33).

9. Claims 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cantone in view of Browning, and further in view of Allen.

Considering claim 16, Cantone discloses a portable movie storage system (column 2, lines 20-30) and a movie playback device (column 2 lines 22-25), however,

Cantone fails to specifically disclose said storage module including an atomic resolution storage device, a communication interface for communicating to and from said storage device, a system further permitting purchasable access to electronically stored movies, a centralized movie database for downloading to multiple points of purchase, and a point-of-purchase center for selectively transferring a copy of a movie to the movie storage module, as recited in the claim.

Browning discloses an information storage device consisting of an atomic resolution storage component (column 2, lines 54-57); an interface for communication to and from said memory component of the storage module (Browning, see controller 26, column 2, lines 64 through column 3, lines 4), and wherein said storage device is capable of storing digitized media (including movies) (column 5 lines 46-56), for the advantage of providing a compact and low-power method of storing and recalling digitized media.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Cantone whereby said storage module includes an atomic resolution storage memory and a communication interface for communicating to and from said storage device, as taught by Browning, for the advantage of providing a compact and low-power method of storing and recalling digitized media.

The combined systems of Cantone and Browning fail to disclose a system permitting purchasable access to electronically stored movies; a centralized movie database for download to multiple points-of-purchase; and a point-of-purchase center

for selectable transferring a copy of the selected movie from said database to the movie storage module memory component.

Allen discloses a system allowing purchasable access to electronically stored movies (column 3, lines 34-40); a centralized movie database for downloads to multiple points-of-purchase (column 2, lines 22-24); and a point-of-purchase center for selectable transferring a copy of the selected movie from said database to the movie storage module memory component (column 2, lines 44-48), for the advantage of allowing the convenient purchase of a large, centrally located selection of movies to a multitude of customers.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined methods of Cantone, and Browning to further include a system permitting purchasable access to electronically stored movies; a centralized movie database for download to multiple points-of-purchase; and a point-of-purchase center for selectable transferring a copy of the selected movie from said database to the movie storage module memory component, as taught by Allen, for the advantage of allowing the convenient purchase of a large, centrally located selection of movies to a multitude of customers.

Considering claim 18, the combined methods of Cantone, Browning and Allen, further disclose a system wherein the network and corresponding receiver of the centralized movie database and point-of-purchase-center comprise a satellite network and receiver (Allen, column 5, lines 28-33).

10. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cantone in view of Browning, and further in view of Allen, and further in view of Chung.

As for claim 17, the combined systems of Cantone, Browning, and Allen disclose a personal movie storage module comprising an atomic storage memory device, a means for transferring a movie to said device, and a movie playback device for playing back said movie.

Cantone, Browning, and Allen fail to specifically disclose a system wherein the playback device is a personal portable playback device.

Chung discloses a system wherein the playback device is a personal portable playback device (Chung, column 2, lines 24-30), for the advantage of being able to easily transport the playback device and view the stored movie from a variety of locations.

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the combined methods of Cantone, Browning, and Allen to further include a system wherein the playback device is a personal portable playback device, as taught by Chung, for the advantage of being able to easily transport the playback device and view the stored movie from a variety of locations.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Palatov et al. (US 2001/0029583) discloses a video content distribution system utilizing a memory device operatively used to store and recall digitized movie content downloaded from a public kiosk. The examiner has reviewed its parent continuation-in-part application 09/506,261 and determined that the earlier filing date of February 17, 2000 is valid for the related child application.

12. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mitchell J Corbett whose telephone number is (703) 305-8982. The examiner can normally be reached on Monday-Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (703) 305-4755. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-HELP.

Mitchell Corbett

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Patent Examiner
AU 2614

MJC


CHRIS GRANT
PRIMARY EXAMINER